

# The Effect of Educative Visual Arts Practices on Social Functionality in Patients with Schizophrenia

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## Abstract

The purpose of this research is to examine the effects of educative visual arts practices on social functionality of patients with schizophrenia. The study population of the research consisted of 30 schizophrenia patients who were registered in Erzurum Regional Training and Research Hospital Community Mental Health Center diagnosed with schizophrenia and still continuing their treatment. The study sample consisted 30 patients in total and all of them were experimental group. The experimental group read the informed consent form and accepted the information statement voluntarily. The criteria for inclusion in the study were to be between the ages of 18 - 68 to participate in the research voluntarily to answer the tests and to take part in educative visual arts practices. Social functionality scale was applied to the experimental groups as a pre-test and post-test. Visual arts applications were made to the experimental group. According to the findings, it was concluded that the visual arts educative practices applied to the experimental group had a positive effect on the development of social functionality of patients with schizophrenia.

## Keywords

Visual Arts Practices, Schizophrenia, Social Functionality

## 1. Introduction

Schizophrenia is a disease that brings serious psycho-social limitations and patients with schizophrenia often encounter many difficulties in their professional

lives. Because they have difficulties in adapting to their social roles. The reason for these difficulties is the low ability of individuals to realize their responsibilities to fulfill their duties to use their personal hygiene and leisure time. It is observed that this disease presents a very complex situation and patients frequently experience; hallucinations, delusions, behavioral problems and disinformation in social functions. Therefore it is a very common psychotic condition. Visual arts educative practices aim to reveal individuals who are self-confident, productive and help them develop their aesthetic senses enabling individuals to highlight their talents and develop their creativity (Özgenel, 2016: p. 263). Visual fine arts are some kinds of arts that arouse more excitement in the human soul and emotions (Bingöl, 2006: p. 514). Visual arts are some branches of arts that cover many special areas from painting, graphic design, sculpture art to ceramic art; from architecture to textile art, tile, mosaic, stained glass, fashion, ceramic illumination, calligraphy, miniature, with the uniqueness of each individual, with its originality, with the sublimity of being an individual with personality (Özsoy, 2003: p. 41). Studying on visual arts with a method that includes aesthetics and application areas enables individuals to understand and value art as well as practicing it. Because it is an understanding of art that feeds on other branches of art (Peşkersoy & Yıldırım, 2008: p. 7). Thus, it is thought that visual art works have an impact on the social functionality of patients with schizophrenia, thanks to the ability to develop creativity, evaluation and interpretation of art and the ability to produce different ideas and products with syntheses as well as personal satisfaction of individuals. Generally it is very effective in the fields of painting, sculpture, architecture, ceramics, graphics, applied arts, textiles, fashion design, film, photography and industrial design, and in a sense it controls those fields (Yılmaz, 2005: p. 16). Schizophrenia is a devastating disease with its consequences. This disease can only be diagnosed thanks to the attitudes and behavioral patterns. Thoughts on this topic emerged in the 15th century, Belgian psychiatrist Morel used the term “Demetia Praecox”. In 1960, he wrote his studies and observations about a child in his book “Mental Patients” (Yüksel, 2006: p. 221). “Heberfrenia” was added by Hacker in 1871, Kahlbaum “Catatony” in 1874, and Krapelin added “Paranoid” and “Simple types” to these two clinical pictures. In 1911, Bleuler published his work “Dementia Praecox and the Group of Schizophrenia” and stated that this disease can not always be said to progress with destruction as a result. In the late 1960s while Schneider’s “First-Order Symptoms” were in widespread used in Europe, Americans were diagnosing according to Bleuler’s definition of schizophrenia (Güleç & Köroğlu, 1997: p. 321). The thought and emotion disorder was named “Demansprecos” for the first time in the language of science. The equivalent of this idiom in our mother tongue is “Early Dementia”. In 1991, Swiss Doctor Eugen Bleuler used the term “schizophrenia” for this disease (Işık, 2001: p. 32). The main factor in determining schizophrenic thought is a number of fears and worries. As the pressures and fears from the outside get heavier they disrupt the thought balance of the people

(Coşturoğlu, 2005: p. 142). Indifference and indifference to the consequences of behavioral actions draw attention (Güleç, 2009: p. 43).

In here the negative symptoms related to the disease includes narrowing of the range of emotional expression and a decrease in its intensity, a decrease in the fluency of thinking and speaking and not initiating a goal-directed behavior (Jacobson & Jacobson, 2006: p. 51). According to Yalom (2014) in this process hallucinations, verbal over-productivity, thought disorder, disintegration of thought, adding something on their own, exuberant and over-aroused, reference ideas and other delusions can be expressed as symptoms in acute distress (Yalom, 2014: p. 165).

Öztürk (2002) explained that besides genetic factors' changes in brain structure, neuro-chemical changes, neuro-physiological changes, endocrine factors, viral and immune factors can be mentioned. In this study, it was thought to answer whether educative visual arts practices made by schizophrenic patients had a positive or negative effect on the social functionality of these patients. Can (2012) claimed that social functionality is the behavior patterns that the individual puts forward based on the activities in which he or she enjoys the natural environment (Can, 2012: pp. 107-108).

## 2. Schizophrenia Treatment

In general if a problem has emerged with post natal learning it can be treated with appropriate methods and techniques. The fact that mental illnesses are seen as stress-related bio-medical disorders have been influential in more researches on the causes and treatments of these diseases and in the need for more cooperation between patients, patient relatives and professional area experts in their treatment and recovery (Lieberman, 2011: pp. 305-306). For this purpose the use of drugs can also be somewhat counterbalanced (Metz, 2014: p. 123). Hospitalization and psychosocial efforts can also be considered as healing methods. In addition oral rehabilitation can be understood as a significant experience (Kaplan & Ve Sandock, 2004: p. 47). Henry Ey defined these problems similar psychiatric disorders as "Pathologie De La Liberte" (pathologies of freedom). Art and especially visual arts education are generally considered in the same category. Of course there will be some fundamental differences as well. It is natural that there are some fundamental differences between arts and visual arts in terms of educational sciences. Students are expected to be able to create their own forms to express their ideas and feelings through visual arts education (Ayaydin, 2009: p. 64).

Besides fine arts educative applications are very important and meaningful for the participants:

- To enrich the world of feelings and thoughts,
- To show the ways and methods in which he can express himself, his feelings, thoughts and dreams, beings,
- To introduce the historical and natural environment, nature with all its living

and non-living

- To understand and perceive the society in which they live,
- It aims to discover the ore in its essence and thus to make it a balanced individual (Peşkersoy & Yıldırım, 2012: p. 7).

### 3. Art Education

Art is a description of expression and self-expression. The message to be conveyed reveals itself with the materials used in this framework. This also impresses with the skills of competent educators in using modern technologies (Akçadoğan, 2006: p. 11). Art education is also very important for some psychological treatment. Because art is a vital part of modern science and technology. It may be thought that it is the only way to develop people to see clearly, practice reality more clearly, think analytically, question, break free from oppressive contracts, create novel patterns geared towards development, and significantly contribute to the advancement of societies (Yeniasır & Gökbulut, 2018). In other words the success of an instructional institution is also dependent on student motivation, educational success and joy at their education system and application (Yafi et al., 2021).

Additionally it is possible that variables such as encountering some different environments than the student expected, to make the program harder than expected. In other words it may not be suitable for their effectiveness in return for their burnout, vitality, and education satisfaction (Demirbatır, 2020). Despite the effective gains of aesthetic education to knowledge in China, the subjects of visual arts is also not understandable in society (Yue, 2022). As it is known that self efficiency is not a purpose, a demand for control, a psychological feature. And also it is not a result expectation (Ran et al., 2022). It is the capacity to integrate the desired goals with somebody's potential, abilities, and skills in special situations. It has a major part in a factor of common psychological disorders. Poor self efficiency is directly correlated with avoidant behavior, sadness, and dysfunctional anxiety (Kausar & Ahmad, 2021). Self efficiency is associated with a variety of psychological difficulties. If people have depressive mood tendencies they believe that they are completely incapable and a failure. It is known well that performing arts is an extracurricular activity that contributes to the psychological wellbeing students (Kausar & Ahmad, 2021).

#### **A quality arts education:**

- A perspective that is aware of the existence and importance of art education,
- A curriculum (teaching) program that renews itself according to the changing and developing conditions of the age,
- Qualified art educator,
- Sufficient course hours,
- It is realized with physical equipment and tools suitable for the purpose (Buyurgan & Buyurgan, 2007: pp. 16-17).

In this study, the effect of educative visual arts practices made by schizoph-

renic patients on the social functionality levels of the patients were evaluated.

### **The theoretical relation between fine arts education and treating schizophrenia**

Hogan (2009) provided a continuum of art that provides clarity in distinguishing many different art-making interventions offered in mental health settings. Art therapy falls within the scope of art interventions focused on art-making in which very little verbal therapy is informed (Hogan, 2009). This method encourages the schizophrenia patients to freely explore their creativity not as patients in a therapeutic or clinical space, but as artists in a studio-like space. The approach to using arts as therapy began with the pioneers Adamson (1984), Schaverien (1992) and Cramer & Brilliant (2001), to be inherently healing. Adamson successfully put it, “*It’s the art that matters...it’s what makes them better*” (Seftel, 1987: p. 50). But in contrast to their more psychoanalytical understandings of works of art, our approach has been to focus on the effect of educative visual art applications on schizophrenia.

As it is known well that in many respects it is impossible to completely separate art therapy and art activities as therapy (Rankanen, 2017). During art therapy activities the participants feel that they are artists not patients. Therefore, in their study it was tried to keep a line between fine art healing therapy and schizophrenia. In keeping with this interest in the person as artist, they chose a broadly phenomenological framework focused on uncovering lived embodied experience. This approach included Merleau-Ponty’s phenomenological theories of embodied art (Haworth, 1997; Parry, 2011), Csikszentmihalyi’s theories of creative flow (Csikszentmihalyi, 1996), and McCarthy et al. (2006) dialogic insights into the relationship between the artist and art work.

*“Merleau-Ponty’s theories of embodied art are directly based on his theories of perception. In Merleau-Ponty’s view, the pre-reflective embodied dimension of experiences lies at the center and foundation of all experiences of the self, the world, and others (Merleau-Ponty, 2014/1945). In Indirect Language and the “Voices of Silence” he describes how art-making can be seen as a visual representation of this process, a kind of “equivalence system” that emerges in the dynamic sensorimotor interaction between the artist and the art materials (Merleau-Ponty, 2007: p. 255). As Haworth (1997) explains, Merleau-Ponty’s theories of embodiment in artwork provide a framework for thinking about individual artistic styles as emerging from the body and informed and shaped by the individual’s history. Moreover, as Parry (2011) argues, making art, like all other perceptual endeavors, can lead to new understandings and even transformations in the artist’s life world.”*

## **4. Research Problem**

- What is the effect of educative visual arts practices on the social functionality in patients with schizophrenia?

### **Sub Problems**

- What is the level of distribution of the patients' functionality skills according to the results obtained after the visual arts applications given in the Community Mental Health Center and the social functionality test applied to schizophrenia patients as a pre-test?
- What is the level of the distribution of the visual arts practices given in the Community Mental Health Center to the functional skills of the patients according to the scores obtained after the social functionality test applied to schizophrenia patients as a post-test?
- Is there a significant difference between the social functioning test averages administered to the patients before and after the experiment?
- Do visual arts lessons and educative visual arts practices given to schizophrenic patients have an effect on their social functionality and skills?

In the study answers to the above-mentioned questions were tried to sought. The effect of visual arts educative practices on the social functionality of patients were studied on and contributed to the examination of many features of the patients such as creativity, expressing themselves through art, using fine motor skills, recognizing colors, using materials, comprehending techniques, reflecting their originality in their studies, helping in groups, and the importance of unity can be considered.

It was thought that this study had an important place in terms of the effect of visual arts lessons given to schizophrenic patients who were treated at Atatürk University Research Hospital, Regional Training Hospital and Community Mental Health Center in Erzurum city center on their social functionality.

In this study it was tried to be studied on to understand the effect of visual arts practices for patients with schizophrenia change their social functionality. In this study it was tried to be studied on to understand the effect of visual arts practices for patients with schizophrenia change their social functionality.

## 5. Method

The population of this study consisted of 30 schizophrenia patients registered in Erzurum Regional Training and Research Hospital, Community Mental Health Center and continuing their treatment. The sample of the study had 30 schizophrenic patients such as experimental group. The study group were informed about the consent form. They read it and accepted the information statement voluntarily. The inclusion criteria were to be between the ages of 18 - 68, to voluntarily agree to participate, and to be able to answer the tests. It could be stated that the study consisted of only experimental group and so it was an experimental study with pre-test post-test applications.

### **Population and Sample/Study Group/Participants**

The population of the study consisted of schizophrenic patients registered in Erzurum Numune Hospital, Community Mental Health Center (TRSM). The sample group consisted of 30 patients with schizophrenia who voluntarily agreed to participate in the study.

Criteria to be considered while determining the study groups;

- The patient's openness to communication,
- The patient's diagnosis of schizophrenia at least one year ago,
- The patient's willingness to participate in the research.

Since the experimental design was used in the research the study group was schizophrenia patients enrolled in Erzurum Regional Training and Research Hospital Community Mental Health Center (TRSM) and taking visual arts practices were formed in the 2017-2018 spring semester. The experimental study with the research group was carried out in 4 weeks. There is equivalence among the participants because they are all treated with the same diagnosis in the relevant department of the health institution. All of them participated in fine arts education on a voluntary basis. The average ages are approximately the same. All of them are at a level where they can communicate and interact with the trainers.

In balancing the working group only one group was formed taking the group environment into account. As a result the educational income and age averages of the (experimental) group was a homogeneous group. Because they had the same environment, they were continuing to have the same treatment for their psychological disorder called schizophrenia. Group matching method was administratively feasible but two problems would be encountered. First the variables may be unknown. Second individual difference may be masked by group means. In experimental studies subjects are assigned impartially in the unbiased assignment method. To be made and the large number of subjects in the research increases the probability of forming appropriate groups with unbiased assignment. Advantages of the study does not form the theory of the variables and prevents bias in the subjects during assignment (Büyükoztürk, 2014: p. 22).

#### **Data Collection Tools**

Socio-demographic data form and social functionality scale were used in the study.

#### **Socio-Demographic Data Form**

After the study form was read to the patients and the purpose of our study was explained their consent and it will be obtained and the Social Functioning Scale (SSS) will be administered in approximately 30 - 35 minutes for their level of functionality. These applications were made by the researcher in classrooms where the patients could express themselves comfortably and through face-to-face interviews. The data collecting form consisted of 22 questions including personal information such as the age of the patient whether he or she was married or single.

#### **Social Functioning Form**

It was created in 1990 by Maxbirchwood et al. Its reliability and validity were made by Erakay (2001) in our country. The important thing in the functionality scale is to evaluate the roles performed in accordance with the social role of the person. Thus, it evaluates the basic abilities and social behaviors of the person in

terms of quantity. It was divided into seven parts as social withdrawal, interpersonal functionality, primary social activities, leisure time, independence-competence, independence-performance and job/occupation. When we examine other scopes there are 4 items with a minimum score of 0 and a maximum score of 15. A minimum of 0 and a maximum of 9 points are determined by summing 1 and 2 in these 4 items. While a minimum score of 0 and a maximum of 39 is obtained in independence competence a minimum of 0 and a maximum of 39 in independence performance; minimum 0, maximum 45 in evaluating leisure time while taking points, a minimum of 0 and a maximum of 66 points can be given in the antecedent social activities. If it is found suitable for the person two items are filled in the field of profession. In this case the other factor that is important is that if the person has not been looking for a job or not working for 6 months it is given up. The sum of the minimum and maximum scores that can be obtained from the social functionality scale is 0 - 223. Thus the high total scores of all subscales indicate that social functionality is appropriate (Maxbirchwood'tanakt, Ersögütçü, 2015: pp. 63-64).

### **Social Functioning Scale**

One of the sub-dimensions of the Social Functioning Scale which consists of seven sub-dimensions is the Independence-performance sub-dimension (Birchwood et al. (1990). The validity and reliability of the scale was performed by Yaprak Erakay in Turkey (2001). In the reliability analysis of the scale, the Cronbach Alpha internal consistency coefficient was 0.807. The reliability coefficient between the evaluations was obtained as 0.95 between the patient and the patient's relatives. Considering the compatibility of the items in the sub-dimensions of the scale with our culture, it was decided to use only the independence-performance sub-dimension. The independence-performance sub-dimension consists of 13 questions and the items are evaluated on a 4-point Likert scale as "never", "rarely", "sometimes", "often". A minimum of 0 and a maximum of 39 points can be obtained from the items. The higher the score, the higher the level of functionality.

### **Process and Application**

Socio-demographic data form and social functionality form were filled in the experimental group of 30 people in the Community Mental Health Center of the Regional Training and Research Hospital where the research was carried out and the pilot application was made such as pre-test. At the stages of the data collection process course hours and the subjects of the method and techniques in visual arts unit were determined and the practices and the way the subjects were handled in the process which was done for four weeks. The subject contents and target acquisitions in this program were planned to be taught for a total of 20 hours in four weeks 5 hours a week as visual arts course, visual arts practices and the course hours allocated for the subject of methods and techniques in visual arts were taken into account in the research and so the planning and the process were made accordingly. The number of patients in the classroom environment,



the Ministry of National Education Visual Arts Practices subjects and materials were taken as basis in the process of creating the materials. The use of materials in order to avoid any disruptions helped the patients' motivation in the classroom using time correctly and establishing multi-faceted communication and it was aimed to prevent disruptions within the four-week plan. In the selection of the materials the participants were free to make the applications they wanted so it was prepared by taking into account the applications that the patients wanted to do. In this process all patients called the experimental group of 30 people chose the material and method they wanted and participated in the learning-teaching process and carried out the visual arts practices activity comfortably. As a result of the process the work schedule created for four weeks and followed. The data and the visual arts practices commissioned were exhibited for a week as patient practices in the corridors of the Erzurum Regional Training and Research Hospital, Community Mental Health Center during the 2017-2018 academic years. Social functionality test was applied to the experimental group as a post-test as a result of the visual arts practices made in order to compare the control group of 15 people with the experiment group where the applications were made and the process was completed.

## 6. Data Analysis

In the analysis of the data collected in the research 5 different statistical analyzes were applied and these analyzes were made on the computer with the SPSS for Windows 22.00 statistical package program.

- 1) Frequency
- 2) Percentage
- 3) Paired sample t-test
- 4) Mann Whitney U test
- 5) Kruskal Wallis H test

In order to measure the social functionality skills of schizophrenia patients in visual arts educative practices the data obtained from the Social Functioning Test were coded and entered into the statistical package program and the analyzes were made through this program. The distribution characteristics of the Social Functioning Test scores were examined in terms of normality. Calculation of values such as percentage, frequency, arithmetic mean and standard deviation of the data obtained during the research process is important in terms of using the analyzes in the research. According to the data handed it was tried to find out if there was a meaningful development and there was a state of recovery about the participants' situations in the process of educative visual arts activities. In other words whether there was a difference between social functionality skills in Visual Arts practices and frequency distribution was used in the research to examine the responses of schizophrenic patients to Social Functioning Test items in Visual Arts practices.

Social functionality scale was applied to the experimental group as a pre-test

and post-test. Visual arts applications were made and applied to the experimental group to find out what the social functionality level was. After defining this level, all the participants were applied an educated fine arts educative and healer activities for four weeks and 20 hours. It was tried to understand if the visual arts practices applied to the experimental group had a positive effect on the development of social functionality of patients with schizophrenia. Experimental group was the only study group consisting of 30 participant people. Painting techniques in the subject of “Methods and Techniques in Visual Arts” in the teacher’s guide book of the General Directorate of the Ministry of National Education visual arts course consisted of pastel paint, dry paint, water color, gouache paint, acrylic, finger paint, felt-tip pen techniques, ceramics, sculpture, collage and wood painting were taught to the patients in the classroom environment.

The subject content and target acquisitions in this program were planned to be taught for a total of 20 hours in four weeks, 5 hours a week as visual arts course, visual arts practices and the course hours allocated for the subject of methods and techniques in visual arts were taken into consideration in the research. The topics and allocated hours of the relevant unit in the MEB textbook are given in **Table 1**.

Socio-demographic data form and social functionality form were filled with voluntary participant statement for study group and one month before the application. In the next stage participants were informed about the subjects of the unit hours and methods and techniques in visual arts by explaining the subjects of pastel paint, dry paint, watercolor, gouache paint, acrylic, finger paint, felt-tip pen techniques, ceramics, sculpture, collage, wood painting, all patients consisting of an experimental group of 15 people. This experimental group members wanted the materials and methods of visual arts practices voluntarily. By choosing and participating in the learning-teaching process the visual arts practices activity was carried out.

**Table 1.** Subjects in visual arts practices and allocated class hours.

<b>Unit: Methods and Techniques in Educative Visual Arts Activities</b>				
<b>Sequence No</b>	<b>Subjects</b>	<b>Subject Number</b>	<b>Duration</b>	<b>Applying Week</b>
1	Crayon, dry colour, water colour, gouache.	4	5 lesson hours	1. week
2	Acrylic, finger paint, felt tip pen techniques.	3	5 lesson hours	2. week
3	Ceramics, sculpture, collage, wood painting.	4	5 lesson hours	3. week
4	Visual arts practices	11	5 lesson hours	4. week

The methods and techniques used in visual arts applications and in this field were explained and the choice of techniques and materials were defined according to the preference of the experimental/study group. In addition to the general materials of each technique the materials were diversified to the extent of the possibilities they could apply. Patients were not compelled to perform a particular technique. Thus they applied the features of each technique with their own talents and wishes. In addition to the richness of expression of visual arts practices it was necessary to be careful to make group work as much as possible in terms of practice. The visuals obtained in the applications were effective in the patients' realization of their unique designs and creativity and their ability to produce original products. The work schedule created for four weeks was a very important step in terms of learning to use the time correctly as well as completing the applications. Thus they completed the practices and they had done on time during the course hour. Various practices in a group classroom environment helped the patients to communicate in harmony with each other and in a multi-faceted manner. In this process the teacher examined their practices and did not intervene.

The schizophrenic patients in the study/experimental group were asked to complete the painting, ceramic and sculpture applications they made according to their own creativity. Thus it was observed that the applications they completed expressed themselves in terms of visibility and produced original products. The teacher remained passive and listener in the visual arts practices made in order to compare the experimental/study group in which the applications were made. It was observed that creativity, originality, and self-confidence emerged in the studies carried out by the experimental group using the methods and techniques in visual arts practices. These practices were exhibited as patient practices in the corridors of Erzurum Regional Training and Research Hospital Community Mental Health Center.

As a result of the visual arts practices that lasted for four weeks the social functionality test was applied to the experimental/study group as a post-test and the process was completed.

**Table 1.** Subjects in Visual Arts Practices and Allocated Class Hours.

Unit: Methods and Techniques in Visual Arts.

Sequence No Subjects Role of the Investigator.

In order for this research to be carried out in Erzurum Regional Training and Research Hospital, Community Mental Health Center the necessary legal permissions were obtained from the Erzurum Ministry of Health and the research was started.

As a data collection tool in the research the Social Functioning Scale (SIS) is a tool that evaluates the judgment made on all social roles and role functions of the person. SCQ evaluates basic skills and social behavior in terms of quantity. The scale was developed by Birchwood et al. (1990) and its validity and reliability study was performed by Erakay (2001). The necessary permission to use the

scale was obtained from Yaprak Erkey. Since the experimental and control group of 30 people consisted of schizophrenia patients and informed consent form was read and signed by the patients as a result of which the researcher “Visual Arts Teacher” gave the socio-demographic data form to be filled by them such as social functionality pre-test. The patients did not affect in the process of the pre and post-tests, no bias was made so that the patients would not respond to the tests during the application phase and under any influence of the next post-test phase.

After the pre-test applications the subjects included in the visual arts applications curriculum were taught in the classroom environment to the experimental group of 30 people and no intervention was made while the patients were given the freedom to choose and apply in the selection of materials and applications. In order to use the time off for the applications efficiently the visual arts teacher explained the subjects in the classroom environment and introduced the materials and showed how the applications would be made for a period of four weeks. After the application the researcher applied a post-test to the experimental/study group and at the end of the application the researcher completed the research. The statistical findings of the data compiled according to the post-test results of visual arts practices were arranged and it was concluded whether there was a significant difference between the pre-test and post-test data.

#### **Validity and Reliability**

In the study, “The Effect of Visual Arts Practices on Social Functioning in Patients with Schizophrenia” was investigated. Social Functioning Scale (SIS) was used as data collection tool. In order to increase the quality of the data collected in the research 5 different statistical analyzes were applied and these analyzes were made on the computer with the SPSS for Windows 22.00 statistical package program. In case of any problems in the pre-test, post-test and visual arts applications of the research or inability to respond to the tests, a spare patient was kept and the research was continued with a certain number of patients who participated voluntarily. Applications and tests were carried out under the supervision of a visual arts teacher consultant and psychologist. No intervention is made to the patients in the tests and applications. Statistical data were made by the expert, data and results were explained.

### **7. Limitations of This Research**

- It was limited to patients with schizophrenia who were enrolled in the Community Mental Health Center in the 2017-2018 academic year of Atatürk University Regional Training Hospital in Erzurum city center and who received visual arts practices in the visual arts class.
- It was limited to the social, economic and cultural conditions of the schizophrenic patients participating in the research.
- It was limited to the data contained in the data collection tool.

In examining the effects of visual arts educative practices on the social func-

tionality of patients with schizophrenia, attention was paid to the incompleteness of the number of patients in the “Study/Experimental Group” in terms of validity and reliability. In the “Pre-Test and Post-Test” practices, care was taken not to influence the patients in terms of both the environment and the teacher. During the 4-week training period the patients were informed about the purpose of the research, the course was taught, the applications were shown, and the choice of application was left to the patients. Precautions have been taken to avoid any time problems. In line with the permission obtained from the Ministry of Health for one month, after the 4-week application program was over, the post-tests were carried out in appropriate environments, the results of the pre-test and post-test were turned into statistics by tabulating the data with an expert in the field in terms of validity and reliability.

## 8. Results

The distribution of schizophrenia patients included in the study according to their descriptive characteristics is given in **Table 2**.

When the table was examined the mean age of the schizophrenia patients included in the study was 43.20 and the age range was between 22% and 67%, 83.3% male, 16.7% female, 16.7% married, 76.7% single, 6.6% divorced or living apart from their spouses, 10% lived alone, 16.6% live with their spouse and children, 46.7% lived with their parents, 60% were primary school graduates, 33.3% were high school graduates, 48.3% had no children, 96.7% currently lived in the city, 100% didn't have a job at the moment, 66.7% worked in their profession between 1 - 5 years, 27.3% worked an average of 40 hours a week when working, 72.7% worked weekly on average of 45 hours or more, 66.7% had relatives or friends who felt social support apart from the family they live with, 76.7% were raised by their mothers in childhood (0 - 1 years), 53.3% were raised with extreme care in their childhood, 36.7% were raised with enough attention in their childhood, 10% were raised without interest in childhood, 3% 7.9 of them were brought up with excessive control in their childhood, 37.9% of them think that their upbringing contributes to coping with the problems in life, 62.1% of them thought that the way of upbringing does not contributed to coping with the problems in life, 76.7% of them had their family together in their childhood, 93.3% it was seen that their mother was alive in their childhood, and 83.3% of them had their fathers in their childhood.

In order to understand whether there is a difference between the Social Functioning Scale (SIS) scores of schizophrenic patients before and after the experiment, the t-test was applied for paired samples and the findings are given in **Table 3**.

The difference between the pre-experimental and post-experimental mean scores of the “Social withdrawal” dimension of the Social Functioning Scale was found to be significant in favor of the posttest at the  $p < 0.05$  significance level. As a result, it can be said that schizophrenia patients' “Social withdrawal” status increased after the experiment.

**Table 2.** Findings related to descriptive characteristics of schizophrenia patients included in the study (n = 30).

		S	%
Gender	Male	25	83.3
	Woman	5	16.7
Marital Status	Married	5	16.7
	Single	23	76.7
	Divorced	1	3.3
	Lives apart from his wife	1	3.3
Who do you live within your h�se?	Alone	3	10.0
	Only with your partner	1	3.3
	Spous and children	4	13.3
	Mother and mother	14	46.7
	Other	1	3.3
	Pasinler nursing home	1	3.3
	Mother	4	13.3
	Brother	1	3.3
	In the nursing home	1	3.3
	Can you live alone?	Yes	10
No		20	66.7
Education Status	Primary education	18	60.0
	High school	10	33.3
	college or university	1	3.3
	Literate (incomplete education)	1	3.3
How many children do you have?	No child	14	48.3
	1	3	10.3
	2	10	34.5
	3	2	6.9
Where she/he currently lives	Town	1	3.3
	City	29	96.7
Where you live as a child	Village	6	20.0
	City	24	80.0

**Continued**

Do you have a job that you work know?	Yes	0	0
	No	30	100.0
How long do you work in your job?	1 - 5 years	20	66.7
	5 - 10 years	3	10.0
	11 years and over	4	13.3
If you work how many hours do you work in a week?	An average of 40 hours	6	27.3
	An average of 45 hours and over	16	72.7
Apart from the family you live with, do you have relatives or friends whose social support you feel?	Yes	20	66.7
	No	10	33.3
Who were you raised by in your childhood (0 - 1 years old)?	Mother	23	76.7
	Father	1	3.3
	Father-mother	4	13.3
	Grandfather on mother's side	1	3.3
	Grandmother on mother's side	1	3.3
What kind of interest did you encounter in your childhood?	With extreme interest	16	53.3
	With enough interest	11	36.7
	Irrelevant	3	10.0
What kind of discipline were you brought up in your childhood?	Extreme control	11	37.9
	Enough control	15	51.7
	Little control	3	10.3
Do you think that your upbringing has contributed to your coping with life's problems?	Yes	11	37.9
	No	18	62.1
How was your family situation when you were a child?	Complete	23	76.7
	Divorced	3	10.0
	Broken	4	13.3
Did your mother live in your childhood?	Yes	28	93.3
	No	2	6.7
Did your father live in your childhood?	Yes	25	83.3
	No	5	16.7
Age	Mean = 43.20	ss = 13.071	
	Minimum = 22	Maximum = 67	

**Table 3.** Differences between pre-experimental and post-experimental social functioning scale (SIS) scores of schizophrenia patients.

		N	$\bar{X}$	S.s.	t	p
1) Social withdrawal	Pretest	30	8.83	2.198	<b>-2.116</b>	<b>0.043</b>
	posttest	30	11.13	5.764		
2) Interpersonal functionality	Pretest	30	5.77	2.079	<b>-3.949</b>	<b>0.000</b>
	posttest	30	7.07	1.893		
3) Early social events	Pretest	30	23.23	9.416	<b>-4.907</b>	<b>0.000</b>
	posttest	30	33.90	11.109		
4) Making use of your free time	Pretest	30	14.20	6.620	<b>-5.613</b>	<b>0.000</b>
	posttest	30	19.87	7.001		
5) Independence-competence	Pretest	30	32.17	5.344	<b>-3.084</b>	<b>0.004</b>
	posttest	30	34.10	3.745		
6) Independence-performance	Pretest	30	20.00	9.266	<b>-3.167</b>	<b>0.004</b>
	posttest	30	23.97	8.806		
7) Job/occupation	Pretest	30	2.07	1.911	-1.235	0.227
	posttest	30	2.27	1.856		
Social Functioning Scale (SIS)	Pretest	30	106.27	28.947	<b>-5.100</b>	<b>0.000</b>
	posttest	30	132.30	29.140		

The difference between the pre-experimental and post-experimental mean scores of the “Interpersonal Functioning” dimension of the Social Functioning Scale was found to be significant in favor of the posttest at the  $p < 0.05$  significance level. As a result, it can be said that the “Interpersonal Functioning” status of schizophrenia patients increased after the experiment.

The difference between the pre-experimental and post-experimental mean scores of the “Anti-social activities” dimension of the Social Functioning Scale was found to be significant in favor of the posttest at the  $p < 0.05$  significance level. As a result, it can be said that schizophrenia patients’ “Preliminary Social Activities” status increased after the experiment.

The difference between the pre-experimental and post-experimental mean scores of the “Evaluating Leisure Time” dimension of the Social Functioning Scale was found to be significant in favor of the posttest at the  $p < 0.05$  significance level. As a result, it can be said that schizophrenia patients’ “evaluation of their free time” status increased after the experiment.

The difference between the pre-experimental and post-experimental mean scores of the “Independence-competence” dimension of the Social Functioning Scale was found to be significant in favor of the posttest at the  $p < 0.05$  significance level.



ance level. As a result, it can be said that the “independence-competence” status of schizophrenia patients increased after the experiment.

The difference between the pre-experimental and post-experimental mean scores of the “Independence-performance” dimension of the Social Functioning Scale was found to be significant in favor of the posttest at the  $p < 0.05$  significance level. As a result, it can be said that the “independence-performance” status of schizophrenia patients increased after the experiment.

The difference between the pre-experimental and post-experimental mean scores of the “Work/occupation” dimension of the Social Functioning Scale was found to be insignificant at the  $p > 0.05$  significance level. As a result, it can be said that there is no significant change in the “work/occupation” status of schizophrenia patients after the experiment.

In terms of the total score of the Social Functioning Scale, the difference between the mean scores before and after the experiment was found to be significant in favor of the posttest at the  $p < 0.05$  significance level. As a result, it can be said that the Social Functioning status of schizophrenia patients increased after the experiment.

As a result, it can be said that the visual arts practices applied to schizophrenia patients improve the Social Functioning status of the patients positively such as defined below **Figure 1**.

Mann Whitney U test was applied for independent groups in order to understand whether there was a difference in terms of Social Functioning Scale (SIS) scores after visual arts practices according to the gender of schizophrenic patients and the findings are given in **Table 4**.

According to the gender of schizophrenic patients, after visual arts educative practices 1) Social withdrawal, 2) Interpersonal functionality, 3) Prior social activities, 4) Making use of leisure time, 5) Independence-competence, 6) Independence-performance, 7) Work/occupational dimensions and Social In terms of the Functioning Scale total score averages, all the differences were found to be

	Before	Later
1) Social withdrawal	8.83	11.13
2) Interpersonal functionality	5.77	7.07
3) Early social events	23.23	33.9
4) Making use of your free time	14.2	10.97
5) Independence-competence	32.17	34.1
6) Independence-performance	20	23.97
7) Job/occupation	2.072	27
Social Functioning Scale (SIS)	106.27	132.3

**Figure 1.** Social functioning scale (SIS) scores of schizophrenic patients before and after the experiment.

**Table 4.** Differences in social functioning scale (SIS) scores of schizophrenia patients after visual arts practices by gender

		N	$\bar{X}$	S.s.	U	<i>p</i>
1) Social withdrawal	Male	25	11.20	6.305	50.000	0.516
	Female	5	10.80	1.483		
2) Interpersonal functionality	Male	25	6.92	1.977	47.000	0.416
	Female	5	7.80	1.304		
3) Early social events	Male	25	32.64	10.396	39.500	0.208
	Female	5	40.20	13.664		
4) Making use of your free time	Male	25	19.12	7.190	41.500	0.251
	Female	5	23.60	4.930		
5) Independence-competence	Male	25	34.28	3.623	54.500	0.666
	Female	5	33.20	4.658		
6) Independence-performance	Male	25	23.16	9.236	43.000	0.300
	Female	5	28.00	5.099		
7) Job/occupation	Male	25	2.48	1.960	40.000	0.229
	Female	5	1.20	0.447		
Social Functioning Scale (SIS)	Male	25	129.80	29.997	40.500	0.229
	Female	5	144.80	22.862		

insignificant at the  $p > 0.05$  significance level. This finding indicates that after visual arts practices, male and female schizophrenia patients 1) Social withdrawal, 2) Interpersonal functionality, 3) Prior social activities, 4) Leisure time, 5) Independence-competence, 6) Independence-performance, 7) Work/occupation dimensions and Social Functioning Scale total scores. As a result, the effect of visual arts practices did not change according to gender.

The Kruskal Wallis H test was applied to independent groups in order to understand whether there was a difference in terms of Social Functioning Scale (SIS) scores after visual arts practices according to the marital status of schizophrenic patients, and the findings are given in **Table 5**.

According to the marital status of patients with schizophrenia, after visual arts educative practices; 1) Social withdrawal, 2) Interpersonal functionality, 3) Prior social activities, 4) Making use of leisure time, 5) Independence-competence, 6) Independence-performance, 7) Work/occupational dimensions and In terms of the total mean score of the Social Functioning Scale, all the differences were found to be insignificant at the  $p > 0.05$  significance level. This finding is based on the marital status of schizophrenia patients after visual arts practices 1) It shows that there was no difference between social withdrawal, 2) Interpersonal

**Table 5.** Differences in social functioning scale (SIS) scores of schizophrenia patients after visual arts practices according to marital status.

		N	$\bar{X}$	S.s.	Ki-kare	<i>p</i>
1) Social withdrawal 2) Interpersonal functionality	Married	5	11.00	2.121	1.144	0.564
	Single	23	11.30	6.533		
	Divorced	2	9.50	0.707		
3) Early social events	Married	5	7.40	1.517	1.869	0.393
	Single	23	7.09	2.043		
	Divorced	2	6.00	0.000		
4) Making use of your free time 5) Independence-competence	Married	5	31.00	8.515	1.503	0.472
	Single	23	34.70	11.971		
	Divorced	2	32.00	8.485		
6) Independence-performance	Married	5	20.20	9.094	0.412	0.814
	Single	23	19.65	6.939		
	Divorced	2	21.50	4.950		
7) Job/occupation	Married	5	34.20	3.564	2.811	0.245
	Single	23	33.74	3.816		
	Divorced	2	38.00	1.414		
1) Social withdrawal 2) Interpersonal functionality	Married	5	27.00	5.612	2.197	0.333
	Single	23	22.70	9.315		
	Divorced	2	31.00	5.657		
3) Early social events	Married	5	1.00	0.000	5.564	0.062
	Single	23	2.39	1.877		
	Divorced	2	4.00	2.828		
4) Making use of your free time	Married	5	131.80	29.021	0.120	0.942
	Single	23	131.57	30.508		
	Divorced	2	142.00	24.042		

functionality, 3) Preliminary social activities, 4) Making use of leisure time, 5) Independence-competence, 6) Independence-performance, 7) Work/occupation dimensions and Social Functioning Scale total scores. As a result, the effect of visual arts practices did not change according to marital status.

The Mann Whitney U test was applied to independent groups in order to understand whether there was a difference in terms of Social Functioning Scale (SIS) scores after visual arts practices according to the ability of schizophrenic patients to live alone, and the findings were given in **Table 6**.

According to the gender of schizophrenic patients, after visual arts educative practices 1) Social withdrawal, 2) Interpersonal functionality, 3) Prior social ac-

tivities, 4) Making use of leisure time, 5) Independence-competence, 6) Independence-performance, 7) Work/occupational dimensions and Social In terms of the Functioning Scale total score averages all the differences were found to be insignificant at the  $p > 0.05$  significance level. According to the visual schizophrenia patients' ability to live alone, 1) Social withdrawal, 2) Interpersonal functionality, 3) Preliminary social activities, 4) In terms of leisure time, 5) Independence-competence, 6) Independence-performance, 7) Job/occupation dimensions and Social Functioning Scale total score averages, all the differences were found to be insignificant at the  $p > 0.05$  significance level. This finding indicated that after visual arts practices, male and female schizophrenia patients' 1) Social withdrawal, 2) Interpersonal functionality, 3) Prior social activities, 4) Leisure time, 5) Independence-competence, 6) Independence-performance, 7) Work occupation dimensions and Social Functioning Scale total scores were similar. As a result, the effect of visual arts practices did not change according to the state of being able to live alone.

The Kruskal Wallis H test was applied to independent groups in order to understand whether there was a difference in terms of Social Functioning Scale (SIS) scores after visual arts practices according to the educational status of schizophrenic patients and the findings were given in **Table 7**.

**Table 6.** Differences in social functioning scale (SIS) scores after visual arts practices according to the situation of living alone in patients with schizophrenia.

		N	$\bar{X}$	S.s.	U	<i>p</i>
1) Social withdrawal	Yes	10	10.30	1.636	99.000	0.964
	No	20	11.55	6.992		
2) Interpersonal functionality	Yes	10	7.20	1.398	96.000	0.857
	No	20	7.00	2.128		
3) Early social events	Yes	10	39.30	10.100	60.500	0.082
	No	20	31.20	10.817		
4) Making use of your free time	Yes	10	22.70	5.100	72.500	0.226
	No	20	18.45	7.494		
5) Independence-competence	Yes	10	33.70	3.889	92.000	0.723
	No	20	34.30	3.757		
6) Independence-performance	Yes	10	27.80	5.412	66.000	0.134
	No	20	22.05	9.638		
7) Job/occupation	Yes	10	2.20	1.687	96.000	0.845
	No	20	2.30	1.976		
Social Functioning Scale (SIS)	Yes	10	143.20	18.402	68.000	0.159
	No	20	126.85	32.277		

**Table 7.** Differences in social functioning scale (SIS) scores of schizophrenia patients after visual arts practices according to educational levels.

		N	$\bar{X}$	S.s.	Ki-kare	<i>p</i>
1) Social withdrawal	Primary Education	18	9.61	1.819	5.426	0.143
	Highschool	10	13.70	9.405		
	Collage/University	1	13.00	0.0		
	Literate	1	11.00	0.0		
2) Interpersonal functionality	Primary Education	18	6.72	2.052	3.893	0.273
	Highschool	10	7.30	1.567		
	Collage/University	1	9.00	0.00		
	Literate	1	9.00	0.00		
3) Early social events	Primary Education	18	34.72	12.203	2.995	392
	Highschool	10	32.70	9.405		
	Collage/University	1	22.00	0.00		
	Literate	1	43.00	0.00		
4) Making use of your free time	Primary Education	18	19.06	7.588	2.075	0.557
	Highschool	10	21.80	6.512		
	Collage/University	1	17.00	0.00		
	Literate	1	18.00	0.00		
5) Independence-competence	Primary Education	18	33.39	4.146	3.379	0.337
	Highschool	10	35.10	2.726		
	Collage/University	1	39.00	0.00		
	Literate	1	32.00	0.00		
6) Independence-performance	Primary Education	18	23.94	9.390	1.663	0.645
	Highschool	10	22.90	8.647		
	Collage/University	1	31.00	0.00		
	Literate	1	28.00	0.00		
7) Job/occupation	Primary Education	18	2.50	2.007	4.454	0.216
	Highschool	10	1.60	1.075		
	Collage/University	1	6.00	0.00		
	Literate	1	1.00	0.00		
Social Functioning Scale (SIS)	Primary Education	18	129.94	33.455	0.351	0.950
	Highschool	10	135.10	24.274		
	Collage/University	1	137.00	0.00		
	Literate	1	142.00	0.00		

According to the educational status of schizophrenic patients, after visual arts practices 1) Social withdrawal, 2) Interpersonal functionality, 3) Preliminary social activities, 4) Making use of leisure time, 5) Independence-competence, 6) Independence-performance, 7) Work/profession dimensions and In terms of the total mean score of the Social Functioning Scale all the differences were found to be insignificant at the  $p > 0.05$  significance level. This finding was according to the educational status of schizophrenia patients after visual arts practices 1) It shows that there was no difference between social withdrawal, 2) Interpersonal functionality, 3) Preliminary social activities, 4) Making use of leisure time, 5) Independence-competence, 6) Independence-performance, 7) Work/occupation dimensions and Social Functioning Scale total scores. As a result, the effect of visual arts practices did not change according to education level.

The Mann Whitney U test was applied to independent groups in order to understand whether there was a difference in terms of Social Functioning Scale (SIS) scores after visual arts practices, according to the status of having a person other than the family they live with, and the results were given in **Table 8**.

After visual arts educative practices according to the status of being a person with whom schizophrenia patients feel social support other than their family

**Table 8.** Differences in social functioning scale (SIS) scores of schizophrenia patients after visual arts practices according to the status of having no one other than the family they live with.

		N	$\bar{X}$	S.s.	U	<i>p</i>
1) Social withdrawal	Yes	20	11.45	6.894	79.000	0.349
	No	10	10.50	2.461		
2) Interpersonal functionality	Yes	20	7.55	1.317	64.500	0.111
	No	10	6.10	2.514		
3) Early social events	Yes	20	34.85	9.201	79.500	0.367
	No	10	32.00	14.591		
4) Making use of your free time	Yes	20	20.45	6.245	95.500	0.843
	No	10	18.70	8.564		
5) Independence-competence	Yes	20	34.45	3.410	86.000	0.535
	No	10	33.40	4.452		
6) Independence-performance	Yes	20	25.00	6.448	93.000	0.758
	No	10	21.90	12.449		
7) Job/occupation	Yes	20	2.05	1.761	83.500	0.421
	No	10	2.70	2.058		
Social Functioning Scale (SIS)	Yes	20	135.80	22.961	88.500	0.613
	No	10	125.30	39.260		

they live with. 1) Social withdrawal after visual arts practices, 2) Interpersonal functionality, 3) Preliminary social activities, 4) Making use of leisure time, 5) Independence-competence, 6) Independence-performance, 7) All the differences in terms of job/occupation dimensions and Social Functioning Scale total score averages were found to be insignificant at the  $p > 0.05$  significance level. This finding showed that after visual arts practices, schizophrenia patients have 1) Social withdrawal, 2) Interpersonal functionality, 3) Preliminary social activities, 4) Making use of their spare time, 5) Independence-competence, 6) Independence-performance, 7) It shows that there was no difference between the job/occupation dimensions and the Social Functioning Scale total scores. As a result, the effect of visual arts practices did not change according to the status of being someone who felt social support apart from the family with whom he lived.

The Mann Whitney U test was applied to independent groups in order to understand whether there was a difference in terms of Social Functioning Scale (SIS) scores after visual arts practices according to the effect of the upbringing of schizophrenic patients on coping with the problems in life, and the findings were given in **Table 9**.

**Table 9.** Differences in social functioning scale (SIS) scores after visual arts practices according to the effect of the upbringing of schizophrenic patients on coping with life's problems.

		N	$\bar{X}$	S.s.	U	<i>p</i>
1) Social withdrawal	Yes	11	10.73	1.794	82.500	0.337
	No	19	11.37	7.182		
2) Interpersonal functionality	Yes	11	7.36	1.748	89.500	0.510
	No	19	6.89	1.997		
3) Early social events	Yes	11	38.55	9.158	70.000	0.137
	No	19	31.21	11.463		
4) Making use of your free time	Yes	11	22.00	4.147	83.500	0.365
	No	19	18.63	8.064		
5) Independence-competence	Yes	11	34.36	3.529	97.500	0.761
	No	19	33.95	3.951		
6) Independence-performance	Yes	11	27.09	6.188	65.500	0.093
	No	19	22.16	9.708		
7) Job/occupation	Yes	11	2.09	2.212	83.000	0.305
	No	19	2.37	1.674		
Social Functioning Scale (SIS)	Yes	11	142.18	14.972	82.500	0.344
	No	19	126.58	33.901		

After visual arts educative practices, according to the effect of schizophrenia patients' upbringing on coping with problems in life 1) Social withdrawal after visual arts practices, 2) Interpersonal functionality, 3) Prior social activities, 4) Making use of leisure time, 5) Independence-competence, 6) Independence-performance, 7) All the differences in terms of job/occupation dimensions and Social Functioning Scale total score averages were found to be insignificant at the  $p > 0.05$  significance level. This finding shows that the schizophrenic patients' 1) Social withdrawal, 2) Interpersonal functionality, 3) Preliminary social activities, 4) Making use of leisure time, 5) Independence-competence, 6) Independence-performance, 7) Work/occupation dimensions and Social Functioning Scale total scores. As a result, the effect of visual arts practices did not change according to the effect of the upbringing on coping with the problems in life.

The Mann Whitney U test was applied to independent groups in order to understand whether there was a difference in the Social Functioning Scale (SIS) scores of schizophrenic patients after visual arts practices according to their mother's living situation in childhood, and the findings were given in **Table 10**.

**Table 10.** Differences in social functioning scale (SIS) scores of schizophrenic patients after visual arts practices according to their mother's living status in childhood.

		N	$\bar{X}$	S.s.	U	<i>p</i>
1) Social withdrawal	Yes	28	11.36	5.908	5.000	0.053
	No	2	8.00	0.000		
2) Interpersonal functionality	Yes	28	7.07	1.961	23.000	0.671
	No	2	7.00	0.000		
3) Early social events	Yes	28	33.82	11.457	26.500	0.901
	No	2	35.00	5.657		
4) Making use of your free time	Yes	28	19.68	6.998	24.500	0.771
	No	2	22.50	9.192		
5) Independence-competence	Yes	28	34.14	3.759	25.000	0.801
	No	2	33.50	4.950		
6) Independence-performance	Yes	28	23.93	9.076	27.500	0.967
	No	2	24.50	4.950		
7) Job/occupation	Yes	28	2.32	1.906	25.000	0.782
	No	2	1.50	0.707		
Social Functioning Scale (SIS)	Yes	28	132.32	30.100	23.000	0.677
	No	2	132.00	12.728		



After the visual arts practices of schizophrenic patients according to their mother's living situation in childhood 1) Social withdrawal, 2) Interpersonal functionality, 3) Prior social activities, 4) Making use of leisure time, 5) Independence-competence, 6) Independence-performance, 7) Work/profession All the differences were found to be insignificant at  $p > 0.05$  significance level in terms of dimensions and Social Functioning Scale total score averages. This finding showed that patients with schizophrenia according to their mother's living status in childhood after visual arts practices of 1) Social withdrawal, 2) Interpersonal functionality, 3) Prior social activities, 4) Making use of leisure time, 5) Independence-competence, 6) Independence-performance, 7) Work It shows that there was no difference between the /occupation dimensions and the Social Functioning Scale total scores. As a result, the effect of visual arts practices did not change according to the living situation of his mother in childhood.

The Mann Whitney U test was applied to independent groups in order to understand whether there was a difference in the Social Functioning Scale (SIS) scores of schizophrenic patients after visual arts practices according to their father's living status in childhood, and the findings were given in **Table 11**.

**Table 11.** Differences in social functioning scale (SIS) scores of schizophrenic patients after visual arts practices according to their father's living status in childhood.

		N	$\bar{X}$	S.s.	U	<i>p</i>
1) Social withdrawal	Yes	25	11.48	6.252	41.000	0.225
	No	5	9.40	1.342		
2) Interpersonal functionality	Yes	25	7.12	1.965	52.500	0.570
	No	5	6.80	1.643		
3) Early social events	Yes	25	33.04	11.781	47.000	0.388
	No	5	38.20	5.848		
4) Making use of your free time	Yes	25	18.64	6.963	<b>15.500</b>	<b>0.009</b>
	No	5	26.00	2.828		
5) Independence-competence	Yes	25	33.40	3.663	<b>18.500</b>	<b>0.014</b>
	No	5	37.60	1.673		
6) Independence-performance	Yes	25	23.40	8.968	44.500	0.315
	No	5	26.80	8.228		
7) Job/occupation	Yes	25	2.16	1.700	57.500	0.758
	No	5	2.80	2.683		
Social Functioning Scale (SIS)	Yes	25	129.24	30.284	38.500	0.181
	No	5	147.60	17.387		

According to the living situation of the father in the childhood of schizophrenic patients, after the visual arts practices 4) The differences in terms of leisure time and 5) Independence-competence mean scores were significant at the  $p < 0.05$  importance level 1) Social withdrawal, 2) Interpersonal functionality, 3) Preliminary social activities, 6) All differences in terms of independence-performance, 7) Job/occupation dimensions, and Social Functioning Scale total score averages were found to be insignificant at the  $p > 0.05$  significance level. This finding showed that after visual arts practices, there was a difference between schizophrenia patients' 4th leisure time evaluation and 5th independence-competence scores according to their father's living status in childhood. When the table was examined, it was seen that the patients who did not have a father in their childhood had a higher mean score of 4) Making use of their spare time and 5) Independence-competence.

As a result, the effect of visual arts practices varied according to the father's living situation in his childhood 4) In terms of leisure time, and 5) In terms of independence-competence, according to the father's living situation in childhood.

## 9. Discussion and Conclusion

The aim of the study is to examine and reveal the effects of visual arts educative studies on the social functionality of patients with schizophrenia. Because until very recently, it was thought that psychotherapy could not be applied to patients with schizophrenia. Patients with schizophrenia cannot benefit from therapy and may even be harmed; the prevailing opinion was that using medication was sufficient. However, despite the success of new generation drugs, drug therapy alone is not sufficient to increase the social and professional functionality of patients. Studies on this problem in literature explained that, contrary to popular belief, psychotherapies increased functionality and treatment success when applied together with medication. Even further versions of psychotherapy have been developed for patients with schizophrenia. The developed psycho-social programs began to be implemented rapidly and widely. In addition to their uses in treating schizophrenia, these programs have also been effective in anticipating and eliminating many dangers. So educative fine arts are very important and meaningful for schizophrenia patients to feel better and be busy with doing something to imagine more comfortable world. For example, the suicide rate decreased in patients who were subjected to an educative psychosocial program. Because patients' social support opportunities have increased, conflicts with their families have been minimized, and hospital stays have been shortened. Especially fine art therapy makes them be busy with doing some activities. For example, when manual and mental skills are activated in a coordinated manner, perhaps mentally undesirable behaviors and tendencies are disciplined. Because, in a sense, the mind controls the hand, the eye, the ear, and the mind with the work that emerges from the hand.

Art psychotherapy process, in which the fine art is used, on the level of functional recovery in anxiety, depression and schizophrenia with individuals diagnosed with schizophrenia. The study was carried out in the design of pre-test post-test half-examinations, with 30 volunteers who had schizophrenia. In therapies, the needs are determined according to the individual characteristics of the patient. Generalizations prevent us from understanding and helping the patient. Just like healthy people, patients with schizophrenia. Because have their own unique differences. Illness does not stereotype people. Therefore, the person's characteristics should be discovered and an approach should be taken accordingly. Even in employment programs, assigning the same job to every patient creates distress for patients.

For this purpose the effect of educative visual art activities applied to the experimental and control group consisting of 30 people about their social functionality (SIO) skills in the form of pretest, posttest and application was examined. Statistical evaluations were made about the data obtained as a result of the application. It was understood from the table data above that visual arts studies with patients had a positive effect on their social functionality and that art in general and visual arts in particular motivated patients, created positive effects in their social lives, developed psychomotor skills, and visual arts applications increased the motivation, thinking skills and social functionality of patients. It was realized that visual arts practices were effective for patients to express themselves through art and it was thought that it could be a data source for different researches to be made in this field and a data source for the literature.

Discussions based on the results of the findings reached within the scope of the research were included. In the study it was observed that the Visual Arts lessons given to schizophrenia patients in Community Mental Health Centers and the applications made for the social functionality and social skills of the patients had positive effects on schizophrenia patients and positive effects on their social functionality in relation to statistical data. In this context it could be said that the patients' ability to express themselves through art and educative visual arts practices contribute to their social lives and that the social functionality positions of schizophrenia patients developed positively after the experiment.

## 10. Suggestions

The suggestions that could be reached as a result of the methods and applications used in the research are as follows:

- It is thought that visual arts teachers should be given to individuals and patients in different institutions and organizations with different methods and techniques, apart from traditional school education methods.
- In the undergraduate program the effect of art on patients can be given in lessons regarding the positive contribution of visual arts practices to patients with schizophrenia and individuals with mental illnesses.
- Encouraging visual arts practices and artistic practices that are deemed ap-

appropriate to increase the social functionality of schizophrenic patients.

- The research may be important in terms of shedding light on future research studies of visual arts practices in patients with schizophrenia.
- It can be reached that visual arts practices can be a comprehensive course not only for the artistic development of students but also for individuals in terms of the scope of visual arts courses.
- Informing schizophrenic patients about the application process and visual arts practices should be given by the researcher.
- Visual arts lessons can be given in Community Mental Health Centers in a more equipped way so that schizophrenic patients can express themselves through art.
- In the processing and application of visual arts lessons, the patients in the study group can reveal their creativity by freely choosing the applications they want with their own choice.
- Giving visual arts lessons to different individuals and schizophrenic patients outside of school may enable cooperation with institutions and organizations.
- Visual arts practices can be given to other patients with mental health disorders, apart from schizophrenia patients.
- Practices and studies on visual arts practices can be increased in terms of quality and quantity.
- Visual arts practices can be compared with schizophrenia patients in areas such as academic achievement, demographic attitude, social skills, self-confidence, motivation, and communication skills with many different practices and different studies.
- In this study, it was concluded that visual arts practices have positive effects on social functionality of patients with schizophrenia. In order to develop and generalize the result of this research, the effect of visual arts on patients can be studied comparatively with different studies.
- The positive effects of visual arts practices on the social functionality of patients with schizophrenia can be conveyed to educators through seminars and conferences organized with the Ministry of Health, Ministry of National Education and Universities.
- An artistic workshop related to visual arts practices can be established and the positive effects of the patients on their original works, their ability to express their inner world, their relaxation with art and their social functionality during their illness can be evaluated.

### **Conflicts of Interest**

The authors declare no conflicts of interest regarding the publication of this paper.

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